

## Exercise 1: API testing for Trello

### Part 1

For this exercise, you will need to sign up in Trello by creating a free account.

Go to <https://trello.com/signup> to create your account

Note:

An empty workspace is created.

By using API calls the following will be covered:

- a. Create a board,
  - b. Create a list (To do's, in progress, done)
  - c. Create cards (i.e., a task, for e.g., writing acceptance criteria)
1. You will need an API key and a token to complete all the activities. Visit the <https://trello.com/app-key> page to get these.

### Developer API Keys

Key:

31bafedc8e01a8615bb9c0d5c057d68e

Token:

Most developers will need to ask each user to [authorize](#) your application. If you are looking to build an application for yourself, or are doing local testing, you can manually generate a [Token](#).

2. Using the Trello API documentation: <https://developer.atlassian.com/cloud/trello/rest/api-group-boards/#api-boards-id-memberships-get>, find the API call that will let you create a board.
3. Create the create board request in postman with the URL and details found in **Step 2**
4. Add a query a parameter under Query Params called 'key' and 'token' (case sensitive) and their values.
5. For the name of the board, we will create a **pre-request script** where an environment variable will be created as shown below:

```
var moment = require('moment');  
pm.environment.set("BOARD_NAME", "<<your_name>>" + moment().unix());
```

6. Write API tests to validate if the board has been successfully created and to check if permission level is private. Hint: Use the code snippet (...JSON value check).
7. Execute the API request
8. There are two ways that can be used to verify if the board was successfully created
  - a) Via GET request
  - b) Or check directly in Trello

Let's try configuring the GET request mentioned above:

Use the API document to get the API of how to get the created board and verify if the name of the board is same as used in **step 5**. (Tip: Make use of request chaining concept and pass data through request)

**NOTE:** Save and create a new collection to safeguard all your workings.

## Exceptional situations

### Error: Board must be in a team - specify an idOrganization

The screenshot shows a REST client interface with a POST request to the Trello API. The URL is `https://api.trello.com/1/boards/?name=My new board&key={{trelloKey}}&token={{trelloToken}}&defaultLists=false`. The request parameters are:

| KEY  | VALUE           | DESCRIPTION |
|--|-----------------|-------------|
| <input checked="" type="checkbox"/> name         | My new board    |             |
| <input checked="" type="checkbox"/> key          | {{trelloKey}}   |             |
| <input checked="" type="checkbox"/> token        | {{trelloToken}} |             |
| <input checked="" type="checkbox"/> defaultLists | false           |             |
| Key  | Value           | Description |

The response status is **400 Bad Request** with a time of 461 ms and size of 1.53 KB. The response body is:

```
1 {
2   "message": "Board must be in a team - specify an idOrganization"
3 }
```

If you get an error like this while creating a new Trello board, you may have too many Trello boards in your account. Please go to your account and delete some boards.

## Part 2

- a) Using trello's online API documentation (<https://developer.atlassian.com/cloud/trello/rest/>) build another request which creates a new list if the board you created above does not contain any list
- b) Inside the TODO list, create a new card (which is like a task) with the name "Learn Postman".
- c) Update a field value in the card and verify if the update was done successfully
- d) Move the card from the TODO list to the DONE list. Write tests to check that the request performed as expected.  
Hint: You will be using the PUT method to update this information.
- e) It is time to clean things up. As you do not need the task, the lists and the board, make sure you delete the board, so that your Trello account does not get filled with useless boards.  
Hint: You will be using the DELETE method to delete the board.